Two types of non-structural case: Evidence from ATB movement in Modern Greek

Based on novel data from ATB movement, we show that what is on the surface a single non-structural case can correspond, in the same language, to two distinct underlying configurations: (i) a DP with special case properties, and (ii) a DP encapsulated in a PP shell (e.g. McFadden 2004, Rezac 2008, Alexiadou et al. 2013). In Greek, two classes of monotransitive verbs that ostensibly both assign the same non-structural genitive show different behaviors when undergoing ATB extraction along with the genitive goal of a ditransitive. We show that the novel observations from ATB march in lockstep with separate previous observations concerning clitic-doubling of the same genitive-marked arguments (Anagnostopoulou & Sevdali 2020). We propose that all asymmetries can be accounted for if one class of verbs takes a DP argument, while the other takes a PP argument with a silent P.

1 Three types of genitives in Modern Greek The first class (*Class 1*) of genitive-object-taking verbs in Greek involves the genitive regularly assigned to the higher object of double object constructions with verbs like 'send', (1) (note that standard MG has lost dative case, and uses genitive instead).

(1) (Tu) estila$_{\text{CLASS 1}}$ tu Jani ɣrama.
3SG.M.GEN send.PST.1SG the John.GEN letter.ACC
'I sent John a letter.'

(2) estila$_{\text{CLASS 1}}$ sto Jani ɣrama.
send.PST.1SG to.the John.ACC letter.ACC
'I sent John a letter.'

Alongside the genitives with ditransitive verbs, there are GEN objects found with two classes of monotransitive verbs. *Class 2* genitives, assigned by verbs like *epitiθeme* 'attack' (3) (cf. Anagnostopoulou & Sevdali 2020:994), pattern with *Class 1* in allowing cliticization and clitic doubling (CLD, shown here) of the GEN object, which can thus be resumed in relativization and CLLD. *Class 3* genitives of monotransitive verbs like *iperisçio* 'prevail over' (4) (Anagnostopoulou 2003:68), do not permit CLD of the genitive, which consequently can't be resumed. Another, hitherto unnoticed, asymmetry is that Class 1 and 2 genitives freely alternate with PPs, see (2) and (5), while Class 3 genitives do not (6).

(3) (tu) epiteθika$_{\text{CLASS 2}}$ tu Jani.
CL attack.PST.1SG the.GEN John.GEN
'I attacked John.'

(4) (*tu) iperisçisa$_{\text{CLASS 3}}$ tu Jani.
CL prevail.over.PST.1SG the.GEN John.GEN
'I prevailed over John.'

(5) epiteθika$_{\text{CLASS 2}}$ sto Jani.
attack.PST.1SG to.the.ACC John.ACC
'I attacked John.'

(6)*iperisçisa$_{\text{CLASS 3}}$ sto Jani.
prevail.over.PST.1SG to.the.ACC John.ACC
'I prevailed over John.'

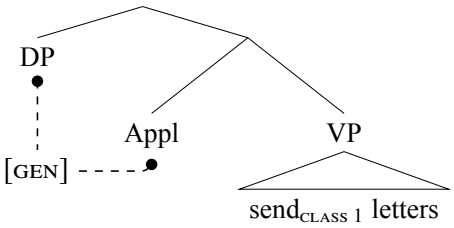
2 ATB movement: Not all genitives are alike As in other languages (e.g., Franks 1995, Citko 2005, Hartmann et al. 2016), ATB movement in Greek obeys a case-matching requirement (not shown). Although the three genitive classes are surface-identical, they are not always compatible with each other in ATB – unlike in many previously studied instances of the phenomenon. Only the combination of Class 1 with Class 2 genitives is grammatical (7); Class 3 genitives do not combine with the other two classes, (8)–(9). To ensure a vP-coordination-plus-ATB parse and rule out CP-coordination-plus-pro-drop in the second conjunct, we use *a)* a negative quantifier in the first conjunct, and *b)* coordination below the auxiliary of a compound tense. Other order of conjuncts not shown; it makes no difference (data provided by native-speaker co-author, confirmed by two more speakers).

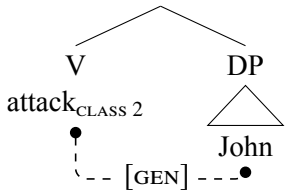
(7) pjanu den eçi kanenas stili$_{\text{CLASS 1}}$ ɣrama ke epiteθi$_{\text{CLASS 2}}$?
who.GEN NEG have.3SG nobody.NOM send.PFV letter.ACC and attack.PFV
'Who has nobody sent a letter to and attacked?' *Class 1 + Class 2*

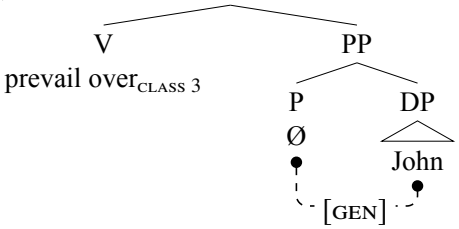
(8) ??pjanu den eçi kanenas stili$_{\text{CLASS 1}}$ ɣrama ke iperiscisi$_{\text{CLASS 3}}$?
who.GEN NEG have.3SG nobody.NOM send.PFV letter.ACC and prevail.over.PFV
'Who has nobody sent a letter to and prevailed over?' *Class 1 + Class 3*

(9) ??pjanu den eçi kanenas epiteθi$_{\text{CLASS 2}}$ ke iperiscisi$_{\text{CLASS 3}}$?
who.GEN NEG have.3SG nobody.NOM attack.PFV and prevail.over.PFV
'Who has nobody attacked and prevailed over?' *Class 2 + Class 3*

3 Proposal We propose that these asymmetries in ATB movement, as well as those found with clitic doubling/cliticization mentioned above, reduce to a categorial difference: Class 1 and Class 2 genitives are DPs (10)-(11), while Class 3 genitives are PPs headed by a silent preposition (12).

(10)


(11)


(12)


Given that PPs are islands in Greek (e.g., there is no P-stranding, see Merchant 2001 a.o.), there cannot be extraction of the genitive DP of Class 3 verbs, on a PP analysis thereof. Instead, the entire PP would have to be moved, leading to a clash when the gap in the other conjunct corresponds to a DP gap.

The categorial asymmetry also accounts for the difference in cliticization/CLD, regardless of the particular analysis assumed for these phenomena. If cliticization/CLD involves Agree (e.g., Angelopoulos 2019, Paparounas & Salzmann 2023 for Greek, and much work since Suñer 1988), it should be able to access DPs but not probe into PPs, leading to cliticization/doubling only with Class 1/2 genitives, but not Class 3. Similar conclusions emerge for movement-based analyses whereby either a clitic head or a whole DP would move, possibly with a merger/rebracketing operation required (for different implementations, see a.m.o. Anagnostopoulou 2003, Rezac 2008, Preminger 2009, Harizanov 2014, Kramer 2014). Across movement-based analyses, the PP shell will block movement of the clitic/D head and/or block rebracketing with the verb.

4 Extension: Themes of acc-acc verbs The ATB diagnostic can also be used to probe the properties of ACC theme objects of verbs like 'teach' and 'serve'. The latter allow 3 different case frames (goal-theme): ACC-ACC, GEN–ACC, PP–ACC. Anagnostopoulou & Sevdali (2020) show that the ACC theme behaves differently in these frames. In the ACC-ACC frame, the theme is restricted to bare NPs and indefinites, while no such restrictions obtain in the other frames. They analyze the theme of ACC-ACC verbs as an NP, the theme in the others as a DP. New support for the assumption that the theme argument can differ in category comes from the observations that *(i)* it cannot undergo CLD in the ACC-ACC frame but can in the others (not shown) and *(ii)* in ATB movement the theme argument of 'serve' can be combined with a regular structural accusative in the GEN-ACC and PP-ACC frames; but crucially not in the ACC-ACC frame (where a DP vs. NP clash obtains):

(13) Ti ðen eçi kanis ðokimasi ke serviri tu Jani / sto Jani / *ton Jani ?
what.ACC NEG has nob.NOM tasted and served the.GEN J.GEN to.the.ACC J.ACC the.ACC J.ACC
'What has nobody tasted and served John?'

5 Conclusion & Outlook The idea that non-structural case can correspond to distinct syntactic configurations, viz., a DP or a PP, even within the same language, has been shown to unify superficially unrelated patterns in clitic doubling and ATB movement. It is orthogonal whether the genitive of ditransitive goals is treated as inherent or structural (the latter possibility having been raised in some recent work, e.g. Baker 2015, Anagnostopoulou & Sevdali 2020) – as long as it is represented as a DP. Time permitting, we will examine the different combinations of genitives in the context of right node raising (RNR), where preliminary data suggests that Class 3 genitives freely combine with Classes 1 and 2, raising questions for a movement-based derivation of RNR and for a full parallelism between RNR and ATB (e.g. Williams 1990, Franks 1992, Munn 1993, Nunes 2004, Larson 2013)